

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein the image data are compressed by an image compression algorithm, and

image data having a large value of “an amount of present code” / “an amount of lossless code” are determined as image data having the large data amount reduction remaining force.

Claim 2 (Cancelled).

Claim 3 (Currently Amended): The image recording apparatus, as claimed in claim [[2]] 1,

wherein the amount of present code and the amount of the lossless code are amounts to which added visual weight is given for every sub-band.

Claim 4 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~
An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein the image data are compressed by an image compression algorithm in conformity to a bitplane coding scheme, and

image data having a large value of “an amount of present code / a total number of non-zero bitplanes” are determined as image data having the large data amount reduction remaining force.

Claim 5 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~
An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein the image data are compressed by a bitplane coding, and image data having a small value of “sum of truncated bitplanes or sum of truncated subbitplanes” are determined as image data having the large data amount reduction remaining force.

Claim 6 (Original): The image recording apparatus, as claimed in claim 5,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the quantization step sizes.

Claim 7 (Original): The image recording apparatus, as claimed in claim 5,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the subband gains.

Claim 8 (Original): The image recording apparatus, as claimed in claim 5,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the inverse component transform gains.

Claim 9 (Original): The image recording apparatus, as claimed in claim 5,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the human visual character.

Claim 10 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~
An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining
force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein image data having a small value of “sum of quantization errors” are determined as image data having the large data amount reduction remaining force.

Claim 11 (Original): The image recording apparatus, as claimed in claim 10, wherein the image data are compressed by a bitplane coding, and the value of “sum of quantization errors” is determined considering the truncated bitplanes or truncated subbitplanes and quantization step sizes.

Claim 12 (Original): The image recording apparatus, as claimed in claim 10, wherein the value of “sum of quantization errors” is determined considering the subband gains.

Claim 13 (Original): The image recording apparatus, as claimed in claim 10, wherein the value of “sum of quantization errors” is determined considering the inverse component transform gains.

Claim 14 (Original): The image recording apparatus, as claimed in claim 10, wherein the value of “sum of quantization errors” is determined considering the human visual character.

Claim 15 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~ An image recording apparatus, comprising:

means for recording image data in a recording medium;
means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and
means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein the image data are compressed by an image compression algorithm in conformity to a bitplane coding scheme, and

image data having a small total number of non-zero bitplanes are determined as image data having the large data amount reduction remaining force.

Claims 16-17 (Cancelled).

Claim 18 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~ An image recording apparatus, comprising:

means for recording image data in a recording medium;
means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein image data having a small number of times of using an application of the data amount reduction process are determined as image data having the large data amount reduction remaining force.

Claim 19 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~ An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein it is determined that the data amount reduction remaining force of image data of a motion picture is greater than the data amount reduction remaining force of image data of a still picture.

Claim 20 (Currently Amended): The image recording apparatus, as claimed in claim [[2]] 1,

wherein in image data of motion pictures, image data of a motion picture having a larger average value or maximum value of the “an amount of present code” / “an amount of

lossless code” are determined as image data having the large data amount reduction remaining force.

Claim 21 (Currently Amended): ~~The image recording apparatus, as claimed in claim 1,~~ An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority; and

means for performing a data amount reduction process against the image data selected by the means for selecting,

wherein it is determined that the data amount reduction remaining force of the image data having a designation of the data amount reduction process is greater than the data amount reduction remaining force of the image data not having the designation of the data amount reduction process.

Claims 22-23 (Cancelled).

Claim 24 (Original): The image recording apparatus, as claimed in claim 1, further comprising:

picture means for photographing a subject to be photographed and inputting the image data; and

image compression means for compressing the image data input by the picture means,

wherein the image data compressed by the image compression means are recorded in the recording medium.

Claim 25 (Currently Amended): ~~The image recording apparatus, as claimed in claim 24, further comprising:~~ An image recording apparatus, comprising:

means for recording image data in a recording medium;

means for obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

means for selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the means for obtaining information, with a priority;

means for performing a data amount reduction process against the image data selected by the means for selecting;

picture means for photographing a subject to be photographed and inputting the image data;

image compression means for compressing the image data input by the picture means;

means for detecting a lack of unused capacity of the recording medium[[]]; and

means for controlling the data amount reduction process for the recorded image data in a case where the lack of unused capacity is detected by the means for detecting,

wherein the image data compressed by the image compression means are recorded in the recording medium.

Claim 26 (Original): The image recording apparatus as claimed in claim 25, further comprising:

means for controlling the rising of a compression ratio of the image compression
means when the lack of unused capacity of the recording medium is detected during a period
in which the image data of a motion picture is input by the picture means.

Claim 27 (Currently Amended): An image data selection method for selecting image
data on which a data amount reduction process is performed from image data recorded in a
recording medium, comprising the steps of:

a) obtaining information for determining a data amount reduction remaining force of
image data; and

b) selecting image data determined to have a large data amount reduction remaining
force, based on the information obtained in the step a), by a criterion, with a priority,

wherein the image data are compressed by an image compression algorithm and
recorded in the recording medium, and
image data having a large value of “an amount of present code” / “an amount of
lossless code” are determined as image data having the large data amount reduction
remaining force.

Claim 28 (Cancelled).

Claim 29 (Currently Amended): The image data selection method as claimed in claim
[[28]] 27,

wherein the amount of present code and the amount of the lossless code are amounts
to which added visual weight is given for every sub-band.

Claim 30 (Currently Amended): ~~The image data selection method as claimed in claim 27,~~ An image data selection method for selecting image data on which a data amount reduction process is performed from image data recorded in a recording medium, comprising the steps of:

a) obtaining information for determining a data amount reduction remaining force of image data; and

b) selecting image data determined to have a large data amount reduction remaining force, based on the information obtained in the step a), by a criterion, with a priority,

wherein the image data are compressed by an image compression algorithm in conformity to a bitplane coding scheme and recorded in the recording medium, and

image data having a large value of “an amount of present code / a total number of non-zero bitplanes” are determined as image data having the large data amount reduction remaining force.

Claim 31 (Currently Amended): ~~The image data selection method as claimed in claim 27,~~ An image data selection method for selecting image data on which a data amount reduction process is performed from image data recorded in a recording medium, comprising the steps of:

a) obtaining information for determining a data amount reduction remaining force of image data; and

b) selecting image data determined to have a large data amount reduction remaining force, based on the information obtained in the step a), by a criterion, with a priority,

wherein the image data are compressed by an image compression algorithm in conformity to a bitplane coding scheme and recorded in the recording medium, and

image data having a small total number of non-zero ~~bitplane~~ bitplanes are determined as image data having the large data amount reduction remaining force.

Claim 32 (Original): The image data selection method as claimed in claim 27, wherein a criterion for determining the data amount reduction remaining force can be selected from a plurality of the criteria.

Claim 33 (Cancelled)

Claim 34 (Currently Amended): ~~A recording medium capable of being read by a processor, comprising a program for making a processor perform steps of an image data selection method for~~ A computer readable medium encoded with computer executable instructions that cause a computer to implement a method of selecting image data to which a data amount reduction process is performed from image data recorded in a recording the computer readable medium, comprising the steps of the method comprising:

- a) obtaining information for determining a data amount reduction remaining force of image data; and
- b) selecting image data determined to have a large data amount reduction remaining force, based on the information obtained in the step a), by a criterion, with a priority, wherein the image data are compressed by an image compression algorithm, and image data having a large value of “an amount of present code” / “an amount of lossless code” are determined as image data having the large data amount reduction force.

Claims 35-68 (Cancelled).

Claim 69 (New): An image recording method, comprising:

recording image data in a recording medium;

obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and

performing a data amount reduction process against the image data selected by the selecting step,

wherein the image data are compressed by an image compression algorithm, and

image data having a large value of “an amount of present code” / “an amount of lossless code” are determined as image data having the large data amount reduction remaining force.

Claim 70 (New): The image recording method, as claimed in claim 69,

wherein the amount of present code and the amount of the lossless code are amounts to which added visual weight is given for every sub-band.

Claim 71 (New): An image recording method, comprising:

recording image data in a recording medium;

obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and

performing a data amount reduction process against the image data selected by the selecting step,

wherein the image data are compressed by an image compression algorithm in conformity to a bitplane coding scheme, and

image data having a large value of “an amount of present code / a total number of non-zero bitplanes” are determined as image data having the large data amount reduction remaining force.

Claim 72 (New): The image recording method, comprising:

recording image data in a recording medium;

obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;

selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and

performing a data amount reduction process against the image data selected by the selecting step,

wherein the image data are compressed by a bitplane coding, and image data having a small value of “sum of truncated bitplanes or sum of truncated subbitplanes” are determined as image data having the large data amount reduction remaining force.

Claim 73 (New): The image recording method, as claimed in claim 72,

wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the quantization step sizes.

Claim 74 (New): The image recording method, as claimed in claim 72,

wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is determined considering the subband gains.

Claim 75 (New): The image recording method, as claimed in claim 72,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is
determined considering the inverse component transform gains.

Claim 76 (New): The image recording method, as claimed in claim 72,
wherein the value of “sum of truncated bitplanes or sum of truncated subbitplanes” is
determined considering the human visual character.

Claim 77 (New): The image recording method, comprising:
recording image data in a recording medium;
obtaining information for determining a data amount reduction remaining force of
image data recorded in the recording medium;
selecting image data determined to have a large data amount reduction remaining
force based on the information obtained by the obtaining step, with a priority; and
performing a data amount reduction process against the image data selected by the
selecting step,
wherein image data having a small value of “sum of quantization errors” are
determined as image data having the large data amount reduction remaining force.

Claim 78 (New): The image recording method, as claimed in claim 77,
wherein the image data are compressed by a bitplane coding, and the value of “sum of
quantization errors” is determined considering the truncated bitplanes or truncated
subbitplanes and quantization step sizes.

Claim 79 (New): The image recording method, as claimed in claim 77,
wherein the value of “sum of quantization errors” is determined considering the
subband gains.

Claim 80 (New): The image recording method, as claimed in claim 77,
wherein the value of “sum of quantization errors” is determined considering the
inverse component transform gains.

Claim 81 (New): The image recording method, as claimed in claim 77,
wherein the value of “sum of quantization errors” is determined considering the
human visual character.

Claim 82 (New): The image recording method, comprising:
recording image data in a recording medium;
obtaining information for determining a data amount reduction remaining force of
image data recorded in the recording medium;
selecting image data determined to have a large data amount reduction remaining
force based on the information obtained by the obtaining step, with a priority; and
performing a data amount reduction process against the image data selected by the
selecting step,
wherein the image data are compressed by an image compression algorithm in
conformity to a bitplane coding scheme, and
image data having a small total number of non-zero bitplanes are determined as image
data having the large data amount reduction remaining force.

Claim 83 (New): The image recording method, comprising:

- recording image data in a recording medium;
- obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
- selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and
- performing a data amount reduction process against the image data selected by the selecting step,

wherein image data having a small number of times of using an application of the data amount reduction process are determined as image data having the large data amount reduction remaining force.

Claim 84 (New): The image recording method, comprising:

- recording image data in a recording medium;
- obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
- selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and
- performing a data amount reduction process against the image data selected by the selecting step,

wherein it is determined that the data amount reduction remaining force of image data of a motion picture is greater than the data amount reduction remaining force of image data of a still picture.

Claim 85 (New): The image recording method, as claimed in claim 69,

wherein in image data of motion pictures, image data of a motion picture having a larger average value or maximum value of the “an amount of present code” / “an amount of lossless code” are determined as image data having the large data amount reduction remaining force.

Claim 86 (New): The image recording method, comprising:
recording image data in a recording medium;
obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and
performing a data amount reduction process against the image data selected by the selecting step,
wherein it is determined that the data amount reduction remaining force of the image data having a designation of the data amount reduction process is greater than the data amount reduction remaining force of the image data not having the designation of the data amount reduction process.

Claim 87 (New): The image recording method, as claimed in claim 69, further comprising:
photographing a subject to be photographed and inputting the image data; and
compressing the image data input by the photographing step,
wherein the image data compressed by the compressing step are recorded in the recording medium.

Claim 88 (New): The image recording method, comprising:

- recording image data in a recording medium;
- obtaining information for determining a data amount reduction remaining force of image data recorded in the recording medium;
- selecting image data determined to have a large data amount reduction remaining force based on the information obtained by the obtaining step, with a priority; and
- performing a data amount reduction process against the image data selected by the selecting step;
- photographing a subject to be photographed and inputting the image data;
- compressing the image data input by the photographing step;
- detecting a lack of unused capacity of the recording medium; and
- controlling the data amount reduction process for the recorded image data in a case where the lack of unused capacity is detected by the detecting step,
- wherein the image data compressed by the compressing step are recorded in the recording medium.

Claim 89 (New): The image recording method as claimed in claim 88, further comprising:

- controlling the rising of a compression ratio of the compressing step when the lack of unused capacity of the recording medium is detected during a period in which the image data of a motion picture is input by the photographing step.